WHAT IS CLAIMED IS:

1.   A digital watermarking apparatus which inputs predetermined information and embeds digital watermark in the predetermined information,

5   comprising:

a verifying section that inputs and verifies set value information, the set value information being provided by encrypting set values necessary for embedding the digital watermark and adding verification data to the encrypted set values;

10   a decrypting section that decrypts the encrypted set values in the set value information verified by the verifying section; and

a watermarking section,

wherein, when a verification result obtained by the information verifying section is normal, the watermarking section embeds digital watermark

15   in the input predetermined information using the set values decrypted by the decrypting section to output the predetermined information embedded with digital watermark, or when the verification result is not normal, the watermarking section does not output the input predetermined information to the outside of the apparatus or invalidates the input predetermined information to output the

20   invalidated information.

2.   The digital watermarking apparatus according to claim 1, wherein the verifying section performs verification with digital signature using public key encryption.

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3.   An application apparatus comprising a reproducing section that reproduces predetermined information stored in a recording medium and the digital watermarking apparatus according to claim 1 that inputs the predetermined information reproduced by the reproducing section and embeds the digital watermark in the predetermine information,

wherein the reproducing section inputs a verification result from the verifying section in the digital watermarking apparatus, and when the verification result is normal, the reproducing section performs a reproducing operation, or when the verification result is not normal, the reproducing section does not perform the reproducing operation or the digital watermarking apparatus invalidates an output of the reproducing section.

4.   An application apparatus comprising receiving and decoding section that receives predetermined information through a communication medium and decodes the received information, and the digital watermarking apparatus according to claim 1 that inputs the information received and decoded by the receiving and decoding section and embeds the digital watermark in the predetermined information,

wherein the receiving and decoding section inputs a verification result from the verifying section in the digital watermarking apparatus, and when the verification result is normal, the receiving and decoding section performs receiving and decoding operations, or when the verification result is not normal, the receiving and decoding section does not perform at least one of receiving operation and decoding operation or the digital watermarking apparatus invalidates an output of the receiving and decoding section.

5.   An application apparatus comprising the digital watermarking apparatus according to claim 1 and a recording section that inputs information output from the digital watermarking apparatus and records the information in a recording medium,

wherein the recording section receives a verification result from the verification section in the digital watermarking apparatus, and when the verification result is normal, the recording section records the information output from the digital watermarking apparatus, or when the verification result is not normal, the recording section does not perform recording operation or invalidates the information output from the digital watermarking apparatus and then records the invalidated information.

6.   An application apparatus comprising the digital watermarking apparatus according to claim 1 and encoding and transmitting section that encodes information output from the digital watermarking apparatus and transmits the encoded information through a communication medium,

wherein the encoding and transmitting section inputs a verification result of the verifying section in the digital watermarking apparatus, and when the verification result is normal, the encoding and transmitting section performs the encoding and transmitting operations or when the verification result is not normal, the encoding and transmitting section does not perform at least one of the encoding and transmitting operations or invalidates the information output from the digital watermarking apparatus and then performs the encoding and transmitting operations.

7.   A digital watermarking apparatus which inputs predetermined information and embeds digital watermark in the predetermined information, comprising:

5   a decrypting section that inputs and decrypts set value information, the set value information being provided by adding verification data to set values necessary for embedding the digital watermark and encrypting at least a part of the set values added with the verification data;

          a verifying section that verifies the set values with the verification

10   data in the set value information decrypted by the decrypting section; and

          a watermarking section,

          wherein, when a verification result from the verifying section shows normal, the watermarking section obtains the verified set values from the verifying section, embeds the digital watermark in the input predetermined

15   information using the obtained set values and outputs the predetermined information embedded with the digital watermark, or when the verification result is not normal, the watermarking section does not output the input predetermined information to the outside of the apparatus.

20   8.   .   The digital watermarking apparatus according to claim 7, wherein the verifying section performs verification with digital signature using public key encryption.

9.   An application apparatus comprising a reproducing section that

25   reproduces predetermined information stored in a recording medium and the

digital watermarking apparatus according to claim 7 that inputs the predetermined information reproduced by the reproducing section and embeds the digital watermark in the predetermine information,

wherein the reproducing section inputs a verification result from

5 the verifying section in the digital watermarking apparatus, and when the verification result is normal, the reproducing section performs a reproducing operation, or when the verification result is not normal, the reproducing section does not perform the reproducing operation or the digital watermarking apparatus invalidates an output of the reproducing section.

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10. An application apparatus comprising receiving and decoding section that receives predetermined information through a communication medium and decodes the received information, and the digital watermarking apparatus according to claim 7 that inputs the information received and

15 decoded by the receiving and decoding section and embeds the digital watermark in the predetermined information,

wherein the receiving and decoding section inputs a verification result from the verifying section in the digital watermarking apparatus, and when the verification result is normal, the receiving and decoding section performs

20 receiving and decoding operations, or when the verification result is not normal, the receiving and decoding section does not perform at least one of receiving operation and decoding operation or the digital watermarking apparatus invalidates an output of the receiving and decoding section.

25 11. An application apparatus comprising the digital watermarking

apparatus according to claim 7 and a recording section that inputs information output from the digital watermarking apparatus and records the information in a recording medium,

wherein the recording section receives a verification result from the verification section in the digital watermarking apparatus, and when the verification result is normal, the recording section records the information output from the digital watermarking apparatus, or when the verification result is not normal, the recording section does not perform recording operation or invalidates the information output from the digital watermarking apparatus and then records the invalidated information.

12. An application apparatus comprising the digital watermarking apparatus according to claim 7 and encoding and transmitting section that encodes information output from the digital watermarking apparatus and transmits the encoded information through a communication medium,

wherein the encoding and transmitting section inputs a verification result of the verifying section in the digital watermarking apparatus, and when the verification result is normal, the encoding and transmitting section performs the encoding and transmitting operations or when the verification result is not normal, the encoding and transmitting section does not perform at least one of the encoding and transmitting operations or invalidates the information output from the digital watermarking apparatus and then performs the encoding and transmitting operations.